OSCAR Operating Schedule

OSCAR 7			OSCAR 8			
DATE (UTC)	Orbit No.	Time UTC HR MN	Eqx W. Long. Degrees	Orbit Na. Mode	Time UTC HR MN	Eqx W. Long. Degrees
1 Dec.	27,653	0020	79.7	13,969 A	0018	60.5
2 Dec.	27,666	0114	93.2	13,983 A+J	0023	61.7
3 Dec.	27,678	0014	78.1	13,997 X	0028	62.9
4 Dec.	27,691	0108	91.7	14,011 A	0033	64.2
5 Dec.	27,703	0007	76.5	14,025 A+J	0038	65.4
6 Dec.	27,716	0101	90.1	14,039 J	0042	66.6
7 Dec.	27,728	0001	75.0	14,053 J	0047	67.8
8 Dec.	27,741	0055	88.5	14,067 A	0052	69.0
9 Dec.	27,754	0149	102.1	14,081 A+J	0057	70.3
10 Dec.	27,766	0048	87.0	14,095 X	0102	71.5
11 Dec.	27,779	0143	100.6	14,109 A	0106	72.7
12 Dec.	27,791	0042	85.4	14,123 A+J	0111	73.9
13 Dec.	27,804	0136	99.0	14,137 J	0116	75.2
14 Dec.	27,816	0036	83.8	14,151 J	0121	76.4
15 Dec.	27,829	0130	97.4	14,165 A	0126	77.6
16 Dec.	27,841	0029	82.3	14,179 A+J	0131	78.8
17 Dec.	27,854	0123	95.9	14,193 X	0135	80.1
18 Dec.	27,866	0023	80.7	14,207 A	0140	81.3
19 Dec.	27,879	0117	94.3	14,220 A+J	0002	56.7
20 Dec.	27,891	0016	79.1	14,234 J	0007	57.9
21 Dec.	27,904	0111	92.7	14,24B J	0011	59.1
22 Dec.	27,916	0010	77.6	14,262 A	0016	60.4
23 Dec.	27,929	0104	91,2	14,276 A+J	0021	61.6
24 Dec.	27,941	0003	76.0	14,290 X	0026	62.8
25 Dec.	27,954	0058	89.6	14,304 A	0031	64.0
26 Dec.	27,967	0152	103.2	14,318 A+J	0035	65.2
27 Dec.	27,979	0051	88.0	14,332 J	0040	66.5
28 Dec.	27,992	0145	101.6	14,346 J	0045	67.7
29 Dec.	28,004	0045	86.5	14,360 A	0050	68.9
30 Dec.	28,017	0139	100.0	14,374 A+J	0055	70.1
31 Dec.	28,029	0038	84.9	14,388 X	0059	71.4
1 Jan.	28,042	0133	98.6	14,402 A	0104	72.6
2 Jan.	28,054	0033	B3.5	14,416 A+J	0109	73.8
3 Jan.	28,067	0127	97.1	14,430 J	0114	75.0
4 Jan.	28,079	0027	82.0	14,444 J	0119	76.2
5 Jan.	28,092	0121	95.6	14,458 A	0124	77.4
6 Jan.	28,104	0021	80.5	14,472 A+J	0129	78.6
7 Jan.	28,117	0115	94.1	14,486 X	0134	79.8

Orbit predictions by Project OSCAR, F. O. Box 1136, Los Altos, CA 94022. To keep abreast of the latest developments, tune in to the regular phone and ow builetins over W1AW, AMSAT bulletins transmitted around 29.490 MHz on Mode A, 145.960 MHz on Mode B, and 435.160 Mode J, during O 7 and O 8 reference orbits, and AMSAT nets (East Coast at 0100 UTC Wednesdays; MId States at 0200 UTC; West Coast at 0300 UTC, all on 3850 kHz isb); (international net at 1800 UTC Sundays on 14,280 kHz usb and 1900 UTC Sundays on 21,280 kHz).

O 7 progresses an average of 28,7373° W. per orbit in a period of 114,9417 minutes. O 8 progresses an average of 25,8013° W. in a period of 103,1974 minutes.

O 8 modes of operation are Mondays and Thursdays — Mode A. Tuesday and Friday — Mode A+J. Saturdays and Sundays — Mode J. Wednesdays are for experimental use on Mode A or J or recharge Mode D. Mode A+J is simultaneous operation of both transponders.

Spacecraft Frequencies

Spacecraft O 7	Uplink	Downlink	Beacon
Mode A Mode B O 8	145.850-145.950 MHz 432.125-432.175 MHz	29.400-29.500 MHz 145.975-145.925 MHz	29.502 MHz 145.972 MHz
Mode A Mode J	145.850-145.950 MHz 145.900-146.000 MHz	29.400-29.500 MHz 435.100-435.200 MHz	29.402 MHz 435.095 MHz
Formulas for cal	culating approximate downlink	frequencies v - downlink from	

ownlink frequencies, x = downlink frequency, OSCAR 7

Mode A Mode B OSCAR 8	x = uplink frequency $-$ 116.450 MHz \pm Doppler shift x = uplink frequency $-$ 578.100 MHz \pm Doppler shift
Mode A	x = uplink frequency - 116.458 MHz ± Doppler shift
Mode J	x = uplink frequency - 581.106 MHz ± Doppler shift

Note: A minus sign in front of the downlink frequency Indicates that the passband of the satellite is inverted in that mode. This means that signals transmitted up to the satellite at the low end of the upfink passband will appear at the high end of the downlink passband.

Additionally, upper-sideband signals transmitted on the uplink will appear as lower-sideband signals on the

Mode J Club

Become a member of the Mode J Club. Complete eight Mode-J contacts, QSL cards are not required. Just list the call sign of each station worked, date, orbit number and station equipment used. Send this information along with \$3 in U.S. funds, a one-time charge to cover the certificate and newsletter costs, to Mode J Club, c/o Larry Roberts, W9MXC, 3300 Fernwood, Alton, IL 62002.

OSCAR 8 QSL

To receive an OSCAR 8 QSL card, send a copy of the telemetry from the 29,402- or 435,095-MHz beacons. Please send your report, along with an s.a.s.e., to ARRL hq.

Further information on the radio amateur satellite program can be obtained free of charge from ARRL hq.





May 17 was a red letter day for the Milwaukee Radio Amateurs Club, Inc. Wisconsin Governor Lee Sherman Dreylus, whose trademark is a red vest and the red pen he signs documents with, proclaimed May 17 Amateur Radio Day in Wisconsin. This notice was displayed on the Milwaukee City Hall. How's that for publicity? (photo courtesy W9SNK)

VISITING JAPAN?

Probably all amateurs visiting Tokyo, whether on business or for pleasure, visit the electronics paradise in the Akihibara section. But they would also do well to take the time to pay a call on the headquarters of the Japan Amateur Radio League in the Sugamo section. Easily accessible by subway, JARL occupies several floors in the CQ building. When we dropped in we were given a very warm greeting. JMIRYK, of the JARL Foreign Affairs Office, gave us a tour, the highlight of which was JARL's newly opened radio museum. The time spent meeting the JARL staff was truly memorable, giving us a better appreciation and truly memorable, giving us a better appreciation and understanding of our fellow amateurs in JA-land. — Paul R. Ryack, WIETH, South Hadley. Massachusetts



W1ETH (center) on a tour of JARL's radio museum and headquarters. Also shown (left to right) are JM1RYK, JARL Foreign Affairs staff; JH1HNH, Publicity Manager; JA1CO, Chief of Technical Information Section and JITRGM, JARL General Manager.